

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-226368

(43)Date of publication of application : 14.08.2002

---

(51)Int.Cl.

A61K 31/122  
A23L 1/30  
A61P 1/04  
A61P 1/18  
A61P 3/06  
A61P 3/10  
A61P 7/00  
A61P 9/10  
A61P 9/12  
A61P 11/00  
A61P 13/12  
A61P 19/06  
A61P 25/28  
A61P 27/12  
A61P 29/00  
A61P 35/00  
A61P 37/08  
A61P 39/06  
A61P 43/00

---

(21)Application number : 2001-026639

(71)Applicant : FUJI CHEM IND CO LTD

(22)Date of filing : 02.02.2001

(72)Inventor : TAKAHASHI JIRO  
NOZAWA YUKA

---

## (54) INHIBITOR AGAINST OXIDATIVE DAMAGE TO ERYTHROCYTE

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain an inhibitor against oxidative damage to erythrocytes, an inhibitor against hardening of erythrocytes, and a stabilizer of erythrocytes, a blood-preservative, and a food having activities for inhibition of the oxidative damage to, prevention of the hardening of, and stabilization of the erythrocyte.

SOLUTION: The inhibitor against the oxidative damage to, the inhibitor against the hardening of, and the stabilizer of the erythrocyte, and the blood-preservative contain astaxanthin or an ester thereof as an active ingredient. The food having activities for the inhibition of the oxidative damage to, the food for the prevention of the hardening of, and the food for the stabilization of the erythrocyte contain the astaxanthin as an active ingredient.

---

## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office